

AMENDMENTS TO THE CLAIMS

1. – 15. (Cancelled)
16. (Original) A process for the identification of new uses of an active agent comprising the following steps:
 - a) identifying a binding molecule for the active agent;
 - b) identifying cellular binding partners of the binding molecule under physiological conditions, and
 - c) identifying medical indications linked to one or more of the binding partners of step b).
17. (New) The process according to claim 16, wherein said active agent is selected from the group consisting of a synthetic compound.
18. (New) The process according to claim 17, wherein said active agent is a synthetic organic drug.
19. (New) The process according to claim 18, wherein said active agent is a small molecule organic drug.
20. (New) The process according to claim 16, wherein said active agent is an active agent of a pharmaceutical composition.
21. (New) The process according to claim 16, wherein said active agent is selected from the group consisting of benserazide, sulindac or parthenolide.
22. (New) The process according to claim 16, wherein in step a) said active agent is bound to a solid support material.
23. (New) The process according to claim 16, wherein said binding molecule as defined in step a) is a protein that directly or indirectly binds to the active agent.
24. (New) The process according to claim 16, wherein said binding molecule as defined in step a) is part of a sample derived from a mammal.

25. (New) The process according to claim 24, wherein said mammal is suffering from an impaired condition or disease.
26. (New) The process according to claim 24, wherein said mammal is a human.
27. (New) The process according to claim 26, wherein said human is suffering from an impaired condition or disease.
28. (New) The process according to claim 27, wherein said impaired condition or disease is selected from cancer, neurodegenerative diseases, inflammatory diseases, AIDS, metabolic diseases, asthma, arteriosclerosis, coronary and heart diseases, and infectious diseases.
29. (New) The process according to claim 28, wherein said neurodegenerative disease is Alzheimer's disease or Parkinson's disease.
30. (New) The process according to claim 28, wherein said inflammatory disease is an allergy or rheumatoid arthritis.
31. (New) The process according to claim 28, wherein said metabolic disease is diabetes mellitus.
32. (New) The process according to claim 16, wherein step a) is performed under physiological conditions.
33. (New) The process according to claim 32, wherein said physiological conditions in step a) are selected from a physiological cellular protein concentration, a physiological pH value, a physiological buffer capacity, a physiological osmolarity, and a physiological temperature.
34. (New) The process according to claim 16, wherein in step b) said cellular binding partners are identified at least in part by a technique selected from the group consisting of specific antibody binding, peptide-sequencing, Maldi-TOF mass-spectrometry, and electrospray-mass-spectrometry.

35. (New) The process according to claim 16, wherein said cellular binding partners as defined in step b) are proteins that directly or indirectly interact with the binding molecule.
36. (New) The process according to claim 16, wherein said physiological conditions in step b) are selected from a physiological cellular protein concentration, a physiological pH value, a physiological buffer capacity, a physiological osmolarity, and a physiological temperature.
37. (New) The process according to claim 16, wherein in step b) the binding molecule is provided and the binding of the cellular binding partners to the binding molecule is determined.
38. (New) The process according to claim 16, wherein step b) is performed using the TAP purification technology.
39. (New) The process according to claim 16, wherein said medical indications in step c) are selected the group consisting of cancer, neurodegenerative diseases, inflammatory diseases, AIDS, metabolic diseases, asthma, arteriosclerosis, coronary and heart diseases, and infectious diseases.
40. (New) The process according to claim 39, wherein said neurodegenerative disease is Alzheimer's disease or Parkinson's disease.
41. (New) The process according to claim 39, wherein said inflammatory disease is an allergy or rheumatoid arthritis.
42. (New) The process according to claim 39, wherein said metabolic disease is diabetes mellitus.